



## **Madison Valley NW Diversion and Washington Park Stormwater Storage Project**

### **SUMMARY OF STAKEHOLDERS' COMMENTS FROM 4/8/09 PUBLIC MEETING**

#### **Meeting Overview**

On April 8, 2009, thirty community members attended a public meeting at the Garfield Community Center to learn about Phase 2 of the project (new stormwater pipeline in the northwest section of Madison Valley basin and stormwater storage in Washington Park). Community members also provided input on the pipeline alignments and landscaping elements for the stormwater storage facility in Washington Park.

#### **Phase 1**

After introducing the project team members, SPU Project Manager, Brent Middleswart, provided a brief update on Phase 1 of the project which is the expansion of the Above-Ground Stormwater Storage Facility at 30<sup>th</sup> Ave. E and E John St. He reported that Phase 1 construction is planned for this summer and will last approximately four months, though he added that landscaping elements may be installed in 2010. SPU will hold a pre-construction meeting to discuss potential construction impacts with the community.

#### **Phase 2**

There will be two more meetings on the design for Phase 2 and one additional meeting before construction. Construction is planned to begin summer 2010 and is expected to last 15-18 months. The location of the stormwater facility is in the southwest section of Washington Park and the Parks Department is the owner of Washington Park. Brent Middleswart explained that the construction and location of the stormwater facility will be away from the soccer field and batting cage. At this point, it is the Parks Department's desire to maintain an "urban forest" feel at the Washington Park site.

Brent Middleswart further explained that SPU will meet requirements for use of rate-payer dollars since this is a utility project. This limits SPU from using rate payer dollars on non-utility amenities, such as playground structures.

#### **Decision-making Process**

Brent Middleswart went on to explain SPU's decision-making process on the pipeline alignment. SPU will make a decision on the pipeline alignment based on the triple-bottom

line analysis, i.e., financial, social and environmental costs and benefits. Comments from the public will be taken into consideration in this analysis.

## **Pipeline Construction and Alignments**

Brent Middleswart presented the two pipeline alignments and approaches under consideration, which are trenchless (tunneling) and open cut. (Note: Meeting materials including maps of alignments can be found at the project Web site [www.seattle.gov/util/MadisonValley](http://www.seattle.gov/util/MadisonValley).)

Mike Massaro, MWH, explained the open cut construction and alignment. Open cut construction requires removing the existing pavement as needed in the pipeline route, digging a trench, placing pipe segments in the trench, backfilling the trench, and constructing a temporary (asphalt) road surface. This process would be expected to proceed at a rate of about 40-50 ft a day (approximately four weeks per block). After pipeline construction has been completed, final tie-ins to the existing storm sewer system would be made and the impacted roadways would be restored to their original condition. Traffic control and access for emergency vehicles will be provided at all times.

Michelle Ramos, Staheli Trenchless Consultants, explained the trenchless construction and alignment. The auger boring construction technique that would be employed involves digging a launch shaft to the depth of the pipe, pushing the pipe into the ground with a hydraulic jack, and using a large auger to remove soil ahead of the pipe and carry it back to the launch shaft. There would be up to four launch shafts and four receiving shafts along the alignment. Tunneling would proceed in two directions from each of the launch shafts. The majority of the construction activities would take place at the launch shafts, where a crane, pipe, excavated soil, and other equipment would be staged. Receiving shafts would have activities requiring cranes and dump trucks during shaft installation and removal of the boring machine. After pipe installation, the shafts would be backfilled and temporary (asphalt) paving would be placed where paving had been removed. After pipeline construction has been completed, final tie-ins to the existing storm sewer system would be made and the impacted roadways would be restored to their original condition.

These activities would continue for approximately eight weeks at each jacking shaft. Receiving shafts would have activities requiring cranes and dump trucks during shaft installation and removal of the boring machine. After pipe installation, the shafts would be backfilled and temporary (asphalt) paving would be placed where paving had been removed. These activities would continue for approximately four weeks at each receiving shaft. After pipeline construction has been completed, final tie-ins to the existing storm sewer system would be made and the impacted roadways would be restored to their original condition. Traffic control and access for emergency vehicles will be provided at all times.

Brent Middleswart explained that the work hours will be according to city policy.

## Question & Answer on Pipeline Construction and Alignments

**Question:** Will certain areas on the alignment map that overlap have both an open cut and trenchless pipeline?

**Response:** The primary choice is trenchless or open cut. There will be one primary method and one alignment chosen.

**Question:** How big is the pipe? How much water is being transported?

**Response:** For open cut, the pipe will be 4 feet in diameter for the majority of the alignment, although it may be up to 5 feet in diameter north of E. Madison St. For trenchless, the pipe will be 4 feet in diameter.

**Question:** Will groundwater be an issue?

**Response:** There will be some challenges, but both pipeline and alignment methods are feasible.

**Question:** I would like to commend the project team on this well-thought out process. I would like to know when the 200-block backyard drain line will be constructed.

**Response:** We're working with individual homeowners to get easements to do the work. We aim to start construction along with Phase 1 this summer.

**Question:** What will the pipeline alignment decision be based on?

**Response:** The decision will be based on our triple-bottom line analysis (financial, social and environmental costs and benefits). Public input will be considered in this analysis.

**Question:** Can you post these materials online?

**Response:** Yes, we will have them posted within a couple of days. The Web address is [www.seattle.gov/util/MadisonValley](http://www.seattle.gov/util/MadisonValley).

**Question:** Will the shaft at MLK Jr. Way E on E Arthur shut down the street?

**Response:** No, one lane of traffic in each direction will be maintained.

**Question:** Will there be settlement after the pipes go in?

**Response:** There should be no settlement after the pipes go in. The streets will be backfilled and restored per SDOT's Pavement Opening and Restoration Rule (Director's Rule 2004-02). The rule requires either CDF (control density fill) or materials approved by SDOT for backfilling the pipe trench. This process verifies the backfill is suitable and capable of supporting the pavement structure.

**Question:** What kind of shoring will be used?

**Response:** We anticipate the contractor would use trench boxes if the trench depth and soil conditions allow. If the soil is sandy or the trench depth exceeds 20 feet, the contractor may use H-piles or slide-rail shoring, but we do not expect to have sandy soil here.

**Question:** Why wouldn't you choose trenchless since the construction impacts seem to be much less?

**Response:** For trenchless, there will be impacts for those who will have a shaft in front of their property. The benefit of open cut is that the pavement that is removed for construction will be repaved and there is a possibility for some new utilities.

**Question:** What is the soil in the area if it is not sand?

**Response:** It is primarily "recessional lacustrine" (i.e., lake deposit).

**Question:** We had softer soil at 30<sup>th</sup> Ave. E and E John St. and there was a lot of vibration during construction. Will it be the same for the pipeline?

**Response:** The soil is harder along the new pipe alignment which generally means that the vibration will be less. However, there will still be vibration.

## **Stormwater Storage in Washington Park**

Tom Finnegan, MWH, briefly described the concept design for the storage facility to be constructed in Washington Park.

Gail Staeger, Nakano Associates, explained that the draft landscape concept for the stormwater facility is in line with Parks Department's desire to keep an urban forest theme at the site. One wall of the stormwater storage tank will be exposed, but most of the tank will be buried and landscaped.

## **Question and Answer on Stormwater Storage in Washington Park**

**Question:** What does the trail tie into from E Madison St.?

**Response:** It would allow access into Washington Park and link with the soccer field.

**Question:** How much water will the tank hold?

**Response:** Storage at the site will hold about 2 million gallons (both above and below ground storage). The tank alone will hold about 1 million gallons. Water will only stay in the tank and above ground storage for a few hours during and after heavy storms.

**Question:** How wide will the service road be and how many parking spaces will be compromised on E Madison St.?

**Response:** The service road will be about 12 feet wide. The driveway entrance on E Madison St. will take up one parking space. We anticipate about 15 truck trips an hour during part of a peak day but on average, there will only be about 1-2 truck trips an hour.

**Comment:** Please consider moving the entrance of the service road away from City People's. There is some space between City People's and the cleaners.

**Response:** We will consider this suggestion.

**Question:** How long will there be 15 dump trucks per hour? Wouldn't that close off E Madison St.?

**Response:** There will only be about 15-20 peak construction days that will have 15 truck trips an hour. These peak days will be scattered throughout construction. We will implement traffic control measures (such as use of flaggers) to make sure that trucks will not block off E Madison St.

**Question:** When will construction start?

**Response:** For Phase 2, we will be in the design phase for the next six months. Permitting will take the following six months. We anticipate construction to start in summer 2010 and last about 15-18 months.

**Question:** Is the stormwater storage on 30<sup>th</sup> Ave. E and E John St. completed?

**Response:** The design is complete and permitting is almost complete. Construction will begin this summer. The primary construction will take approximately four months, and some landscaping elements may be implemented in 2010.

**Question:** Where are the trucks going when they come out of Washington Park?

**Response:** They will likely go out on E Madison St., MLK Jr. Way E and Lk Washington Blvd.

**Question:** How much concrete will be used in the stormwater tank?

**Response:** The rough estimate is about 1000 cubic yards.

**Question:** I live on 29<sup>th</sup> Ave. E and E Roy, what kind of construction impacts will I see and where will the connection to the tank happen?

**Response:** This depends on where the pipeline work starts which will be determined at a later stage. We have not determined where exactly the connection will happen. This will depend on the condition and location of trees in the park and other factors. SPU will work with the Parks Department arborist on this project.

**Question:** Why does this start at 27<sup>th</sup> Ave. E? Will this take care of 30<sup>th</sup> Ave. E and E John St.?

**Response:** Yes, we're diverting stormwater into the Washington Park stormwater facility that otherwise would have flowed into pipes to 30<sup>th</sup> Ave. E and E John St.

**Question:** Is water traveling down to 30<sup>th</sup> Ave. E because of the soil?

**Response:** No, it is not because of the soil. Very large and intense storm events cause the stormwater to travel down the roads, with or without saturated soil, as occurred during the August 2004 and December 2006 storms.

**Question:** What about putting in a swing set at the Washington Park site?

**Response:** As we explained earlier, we cannot use utility dollars for non-utility amenities.

**Question:** Does this take into consideration future development capacity?

**Response:** Under the current code, new developments are required to meet stricter drainage codes than existing structures. We are designing this system to contain the two largest storms on record.

**Question:** How was the artist for the project chosen? Why don't we have someone from Seattle?

**Response:** Artists were invited to apply from all over the Northwest. A Seattle artist participated in the interview process, but the panel selected the current artist, who resides in Portland. A panel of two local artists and one landscape architect were on the artist selection panel. Advisors to the panel included two community members, the landscape architect for Phase 1 and the SPU program manager for the project.

### **Next Steps**

The public is encouraged to submit their comment cards on the pipeline approach and alignment before April 17. The next meeting for Phase 2 will take place in early June.

These notes have been posted on the project Web site, [www.seattle.gov/util/MadisonValley](http://www.seattle.gov/util/MadisonValley)  
*For questions about the 4/8/09 public meeting, or these meeting notes, please contact Elaine Yeung at [elaine.yeung@seattle.gov](mailto:elaine.yeung@seattle.gov).*